

It is claimed:

1. A computer-implemented voice application indexing method for supplying voice applications that provide telephony services to users, comprising the steps of:

5                   receiving voice application data over the network regarding the voice applications, wherein the voice application data includes location data to indicate where the voice applications are located on the network;

                  storing in a database the voice application data in accordance with a predetermined voice application taxonomy;

10                   receiving a request for a voice application based upon a user requiring a telephony service, wherein the request includes search criteria for selecting a voice application from the database; and

                  retrieving from the database the location data of at least one voice application whose stored voice application data substantially satisfies the search criteria;

15                   wherein the voice application located at the retrieved location data is used to perform the user-requested telephony service.

2. The method of claim 1 wherein the voice application data includes voice application operational requirement data, said method further comprising the steps of:

20                   receiving from a telephony server telephony server attribute data, wherein the telephony server is an interface between the user and the database; and

retrieving from the database the location data of at least one voice application whose voice application operational requirement data substantially satisfies the telephony server attribute data.

- 5 3. The method of claim 1 wherein the voice application data includes voice markup language data which indicates type of voice markup language used in the voice applications, said method further comprising the step of:

retrieving from the database the location data of at least one voice application whose voice markup language data substantially satisfies the search criteria.

- 10 4. The method of claim 1 wherein the voice application data includes speech engine requirement data, said method further comprising the steps of:

receiving from a telephony server telephony server attribute data which indicates which speech engines are operational within the telephony server; and

15 retrieving from the database the location data of at least one voice application whose speech engine requirement data substantially satisfies the telephony server attribute data.

- 20 5. The method of claim 1 wherein the voice applications are VoiceXML applications.

6. The method of claim 1 wherein the network is a global communications network.

7. The method of claim 6 wherein the network is an Internet network.

8. The method of claim 7 wherein the location data is a Uniform Resource Locator (URL) which indicates where on the network the voice applications are located on the Internet network.

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9. The method of claim 1 wherein the database is a relational database.

10. The method of claim 1 wherein the voice application taxonomy includes classifications selected from the group consisting of required speech engine resources, required telephony resources, required telephony markup language, required application server environment, and combinations thereof.

11. The method of claim 1 further comprising the step of:  
receiving the request for a voice application through a telephony server  
that is connected to the user.

12. The method of claim 1 wherein the search criteria includes the nature of the telephony service requested by the user.

13. The method of claim 1 further comprising the step of:  
providing the voice application data through a graphical user interface that is in data communication with the network.

14. The method of claim 13 wherein the graphical user interface allows retrieving location data of at least one of the voice applications based upon criteria specified through the graphical user interface.

5 15. The method of claim 1 further comprising the step of:

reviewing the voice application data to ensure accuracy of the voice application data.

16. The method of claim 15 further comprising the step of:

10 reviewing the voice application data to verify the location data of the voice applications on the network.

17. The method of claim 15 further comprising the step of:

15 reviewing the voice application data to verify that the operation of the voice applications on the network complies with the voice application data.

18. The method of claim 1 further comprising the step of:

20 sending on the network an automated searching spider to locate and index additional voice applications that are located on the network.

19. The method of claim 18 wherein the spider is sent when a search of the database does not retrieve based upon the search criteria any location data for the voice applications.

20. A computer-implemented voice application indexing system for supplying voice applications that provide telephony services to users, comprising:

a voice application data structure that contains voice application data that is received over the network and regards the voice applications,

5 wherein the voice application data includes location data to indicate where the voice applications are located on the network;

a database that stores the received voice application data in accordance with a predetermined voice application taxonomy;

10 a database engine with a data connection to the database, wherein the database engine receives a request for a voice application based upon a user requiring a telephony service, wherein the request includes search criteria for selecting a voice application from the database;

15 wherein the database engine retrieves from the database the location data of at least one voice application whose stored voice application data substantially satisfies the search criteria;

whereby the voice application located at the retrieved location data is used to perform the user-requested telephony service.

21. The voice application indexing system of claim 20 wherein the voice application data  
20 includes voice application operational requirement data, wherein a telephony server provides telephony server attribute data to the database engine, wherein the database engine determines the location data of at least one voice application whose voice

application operational requirement data substantially satisfies the telephony server attribute data.

22. The voice application indexing system of claim 20 wherein the voice application data  
5 includes voice markup language data which indicates type of voice markup language  
used in the voice applications, wherein the database engine retrieves from the database  
the location data of at least one voice application whose voice markup language data  
substantially satisfies the search criteria.

10 23. The voice application indexing system of claim 20 wherein the voice application data  
includes speech engine requirement data, wherein the database engine receives from a  
telephony server telephony server attribute data which indicates which speech engines are  
operational within the telephony server, wherein the database engine retrieves from the  
database the location data of at least one voice application whose speech engine  
15 requirement data substantially satisfies the telephony server attribute data.

24. The voice application indexing system of claim 20 wherein the voice applications are  
VoiceXML applications.

20 25. The voice application indexing system of claim 20 wherein the network is a global  
communications network.

26. The voice application indexing system of claim 25 wherein the network is an Internet network.

27. The voice application indexing system of claim 26 wherein the location data is a  
5 Uniform Resource Locator (URL) which indicates where on the network the voice applications are located on the Internet network.

28. The voice application indexing system of claim 20 wherein the database is a relational database.

10 29. The voice application indexing system of claim 20 wherein the voice application taxonomy includes classifications selected from the group consisting of required speech engine resources, required telephony resources, required telephony markup language, required application server environment, and combinations thereof.

15 30. The voice application indexing system of claim 20 wherein the search criteria includes the nature of the telephony service requested by the user.

31. The voice application indexing system of claim 20 further comprising:

20 a graphical user interface with a data connection over the network to the database for providing the voice application data.

32. The voice application indexing system of claim 31 wherein the graphical user interface allows retrieval of location data of at least one of the voice applications based upon criteria specified through the graphical user interface.

- 5 33. The voice application indexing system of claim 20 further comprising:  
automated searching means for locating and indexing additional voice applications that are located on the network.

34. The voice application indexing system of claim 33 wherein the automated searching means is provided when a search of the database does not retrieve based upon the search criteria any location data for the voice applications.

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